

AMENDMENT: IN THE SPECIFICATION

Please enter the Sequence Listing into the application.

1. Please replace the paragraph [0018] with the following amended paragraph(s):

[0018] 1A. Agonist-induced downregulation of opioid receptors. Cells stably expressing MOR, DOR or D MOR (~1-2 pmol/mg) were treated with agonist (10 μ M DADLE, an opioid peptide having the sequence Tyr-D-Ala-Gly-Phe-D-Leu; SEQ ID NO:7; Sigma, St. Louis, MO) for 3 hours or left untreated. Cells were then chilled on ice, washed extensively and total opioid radioligand binding sites were determined for each cell line (16). Both DOR and D MOR showed significant downregulation whereas MOR was not substantially downregulated under the same conditions ($p < .001$). Error bars represent s.d. from a representative experiment (n=3 experiments), with each data point derived from triplicate determinations.

2. Please replace the paragraph [0113] with the following amended paragraph(s):

[0113] The invention also provides GASP polypeptides. A GASP polypeptide of the invention includes a GASP amino acid sequence, i.e., an amino acid sequence that has at least about 70% identity to GASP SEQ ID NO:2 (GASP1) or GASP SEQ ID NO:6 (GASP2) over a comparison window of at least 15 contiguous amino acids. GASP SEQ ID NO:2 (GASP1) is the amino acid sequence of a GASP polypeptide described in detail in Example 1. The nucleic acid and (single-letter code) amino acid sequences of these polypeptides are given below.

GASP1 Nucleic Acid Sequence

atgactggggcagagattgagtctggtgccaggtcaagcctgaaaagaagcctggggaagaggtttaggtgggctgagatagagaa
tgatgtccctctggtggtcagaccaaggttaggaccaggccagataatgcctggggcaaggcccaagaataagtccaaggttatgcct
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SEQ ID NO:1

GASP1 Amino Acid Sequence

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SEQ ID NO:2

GASP2 Nucleic Acid Sequence

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SEQ ID NO:6 SEQ ID NO:5

GASP2 Amino Acid Sequence

MTGAEIEPSAQAKPEKKAGEEVIAGPERENDVPLVVRPKVRTQATTGARPKTETKSVPA
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QS

SEQ ID NO:6

These amendments are made without prejudice and are not to be construed as abandonment of the previously claimed subject matter or agreement with any objection or rejection of record.